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POLISH INDUSTRY PLANS TO UTILIZE SUPERSONIC WAVES

During the Six-Year Plan, supersonic waves will not only be the object of further research by scientists, but they will also find practical application in many branches of industry.

Supersonic waves can be created artificially by piezoelectricity, by magnetostriction, and by mechanical methods using specially constructed tuning forks, whistles, and gigantic sirens.

The intensity of supersonic waves may be 10,000 times greater than the intensity of audible waves resulting from a cannon explosion.

Under the Six-Year Plan, supersonic techniques will be widely used in Polish industry, especially in the chemical and allied industries such as pharmaceuticals and cosmetics. The reason for this is that supersonic waves can be used t produce an ideal and stable emulsion.

In the dye and paint industries, supersonic techniques will be used to break up the particles of colored pigment to 1-2 microns thereby increasing their surface. Supersonic waves will also be used in the production of synthetics.

In the metallurgical industry, supersonic waves will be used to degasify liquid metals to produce a finer grain structure and high cohesion, and in the production of ideal alloys from metals that are difficult to combine, such as lead and aluminum, and silver and gold.

Supersonic wave technology will be applied in the use of the metallurgical defectoscope to discover fissures in plates and sheets and defects in cast metals, within limits of 0.0005 millimeter.

Medicine will also use supersonic waves in defectoscoping bone injuries, in the diathermy of bone marrow, in the production of vaccine, and in pasteurizing.

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